

AMENDMENTS TO THE CLAIMS

Please amend the claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

In the Claims:

1. (Previously Presented) An aluminum oxide catalyst for the hydrolytic decomposition of exhausted perfluoro-compounds by using water, wherein a surface of said aluminum oxide is loaded with phosphorous (P) component at an aluminum/phosphorous mole ratio of 10 to 100.
2. (Original) The aluminum oxide catalyst according to claim 1, wherein said aluminum oxide is selected from the group consisting of gamma alumina, aluminum trihydroxide, boehmite and pseudo-boehmite.
3. (Original) The aluminum oxide catalyst according to claim 1, wherein said phosphorous (P) component is selected from the group consisting of diammoniumhydrophosphate $(\text{NH}_3)_2\text{HPO}_4$, ammoniumdihydrophosphate $(\text{NH}_3)\text{H}_2\text{PO}_4$, and phosphoric acid (H_3PO_4) .
4. (Currently Amended) The method according to claim 1 ~~and~~ 5, wherein said perfluoro-compounds include at least one compound selected from the group consisting of CF_4 , CHF_3 , CH_2F_2 , C_2F_4 , C_2F_6 , C_3F_6 , C_3F_8 , C_4F_8 , C_4F_{10} , NF_3 and SF_6 .
5. (Currently Amended) A method of catalytic decomposition of exhausted perfluoro-compounds, which comprises passing ~~said~~ exhausted perfluoro-compounds through ~~said~~ the catalyst of claim 1 in the presence of water vapor at the temperature range of 400-800°C.
6. (Original) The method according to claim 5, wherein said water vapor is contained at a water vapor/perfluoro-compound mole ratio of 1 to 100.
7. (Original) The method according to claim 5, wherein oxygen is added at a concentration of 0-50% together with said water vapor.

8. (New) The method according to claim 4, wherein said perfluoro-compounds include at least one compound selected from the group consisting of CF_4 , CHF_3 , C_2F_6 , C_3F_6 , C_3F_8 , C_4F_8 , NF_3 and SF_6 .
9. (New) The method according to claim 8, wherein said water vapor is contained at a water vapor/perfluoro-compound mole ratio of 1 to 100 and wherein oxygen is added at a concentration of 0-50% together with said water vapor.
10. (New) The aluminum oxide catalyst according to claim 1, wherein aluminum/phosphorous mole ratio is from 25 to 100.
11. (New) The aluminum oxide catalyst according to claim 10, wherein the aluminum oxide is Al_2O_3 .
12. (New) The aluminum oxide catalyst according to claim 11, wherein the phosphorous (P) component is diammoniumhydrophosphate $(\text{NH}_3)_2\text{HPO}_4$.
13. (New) The The aluminum oxide catalyst according to claim 10, wherein the aluminum oxide is $\text{Al}(\text{OH})_3$.